

September 23, 2021

Mr. David Albright  
Manager, Groundwater Protection Section  
USEPA Region 9 (WTR-4-2)  
75 Hawthorne St  
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1  
Monthly Update for AL/AQL Exceedances at Supplemental Monitoring Well M59-O

Dear Mr. Albright:

Florence Copper is providing this monthly update of supplemental monitoring well M59-O alert level (AL) and/or Aquifer Quality Limit (AQL) exceedances under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit).

Florence Copper has been voluntarily monitoring M59-O monthly for the parameters listed in Table 1 (see attached), and previously submitted a monthly report on August 27, 2021. Table 1 has been updated to include the most recent laboratory results from the monthly sample collected on August 24, 2021, and received on September 19, 2021. The September monthly sample was collected on the 20<sup>th</sup>, and the results are pending.

Rinsing activities continue at the PTF wellfield. Injection into well I-02 was discontinued in August to aid recovery efforts on the east side of the wellfield. Observation wells O-02 and O-03 on the east side of the wellfield near M59-O are demonstrating reduced conductivities (Figures 1 and 2).

During the month, injection and recovery rates were temporarily reduced while repairs to the primary liner were being undertaken at the BHP Pond. Higher recovery rates are expected to resume when the BHP Pond repairs are completed near the end of September. Hydraulic gradients were maintained throughout the month.

Florence Copper will continue monthly sampling of supplemental monitoring well M59-O for parameters which exceeded the ALs and AQLs and will report these results monthly to EPA until all concentrations are below the ALs and AQLs.

Please feel free to contact me should you have any questions or comments.

Sincerely,  
**Florence Copper, Inc.**



Brent Berg  
General Manager

Cc: Nancy Rumrill, EPA Region 9  
Maribeth Greenslade, ADEQ

Table 1. M59-O Monthly Sampling Results

Parameter	AL	AQL	12/28/20	1/18/21	2/22/21	3/23/21	4/14/21	5/19/21	6/01/21	7/19/2021	8/24/21
Magnesium (mg/L)	23	--	57.2	63.1	26.5	19.1	19.8	65.6	59.8	70	59
Sulfate (mg/L)	202	--	865	960	383	228	249	999	850	1200	1100
Total dissolved solids (TDS) (mg/L)	854	--	1,860	1800	970	762	780	2010	1900	2300	2100
Total Uranium (mg/L)	0.0052	--	0.037	0.038	0.0088	0.003	0.0038	0.0096	0.0117	0.0187	0.0326
Adjusted gross alpha (pCi/L)	15.8	15.8	73.5 ± 3.7	35.4 ± 2.5	17.9±1.4	18.8±1.5	18.1±1.2	49.1±2.1	57.3±2.9	29.4±3.2	31.3±3.7
Radium 226+228 (pCi/L)	6.9	6.9	19.8 ± 0.8	22.0 ± 0.8	6.2±0.5	7.0±0.6	10.9±0.7	18.0±0.8	13.6±0.7	15.4±0.7	13.7±0.6
Gross beta (pCi/L)	16	16	43.2±2.7	52.7±3.0	NA	NA	19.6±1.9	52.1 +/- 3.3	36.9±2.9	41.6±3.2	36.8±3.1

**BOLD** values are exceedances of AL and/or AQL

NA: not analyzed

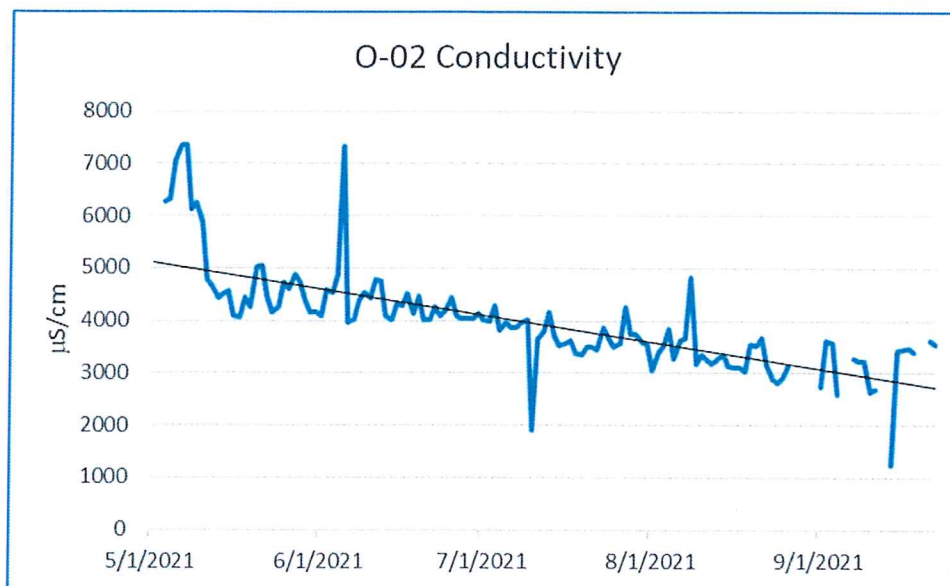


Figure 1. Specific conductance at observation well O-02

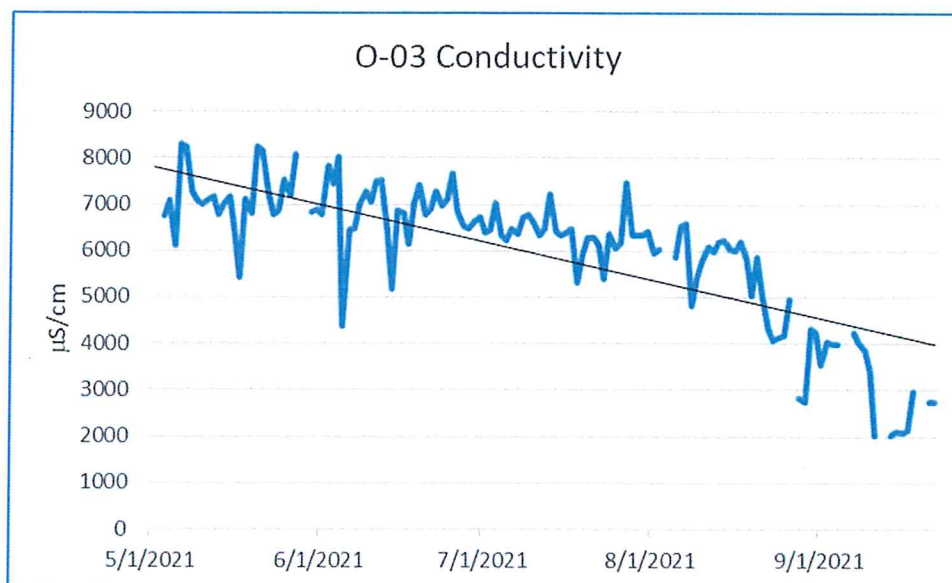


Figure 2. Specific conductance at observation well O-03.